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usage condition signals which are distinct and isolated from internally generated office machine diagnostic signals and office machine data signals;

calendar clock means coupled to said at least one microprocessor for supplying time signals indicative of date and time of day thereto;

means coupled to said at least one microprocessor for generating signals at a predetermined time for initiating a call to a host computer and for transmitting data thereto corresponding to said signals indicative of said at least one usage condition to be reported; and

means coupled to said at least one microprocessor for altering a mode of operation for at least one device within said plurality of devices within said system via commands from said host computer.

REMARKS

Applicant has considered each of the rejections raised in said Office Action, and references cited therein have been carefully reviewed. Applicant respectfully submits, that all of the claims, presently on file are believed to patentably distinguish over the cited references. In view of the above amendments and following remarks presented herewith which are believed to overcome said rejections, Applicant respectfully requests reconsideration and allowance of the subject application.

Rejections to Claims 1-3, 8, 15, 23, 34, 35, 39, and 43 under 35 U.S.C. § 102

Examiner rejected Claims 1-3, 8, 15, 23, 34, 35, 39, and 43 under 35 U.S.C. § 102(b) as being anticipated by Mii (5,282,127). Examiner stated:

Mii teaches a remote office machine management system comprising a plurality of office machinery, host controlling means, processor means, receiving means, timing means, and a signal generating means. Also Mii uses serial data transmission between the office machines and the remote host device.

Applicant agrees with the Examiner. Accordingly, Applicant has amended independent claims 1 and 34 to now more particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, Applicant has amended claims 1 and 34 to now distinctly claim a receiving means *adapted to solely receive usage condition signals which are distinct and isolated from internally generated office machine diagnostic signals and office machine data signals*. Support for these amendments can be found in the specification on page 5, lines 16-19, page 7, lines 24-27, page 8, lines 1-8, and 18-20, page 9, lines 26-27, and page 10, lines 1-12, page 15, lines 23-25, page 16, lines 1, and 21-25.

Applicant has thoroughly reviewed the cited Mii reference and respectfully submits that the Mii reference teaches and claims a receiving means limited to use with a *data* transmission line interface to an office machine. For example, column 4, lines 33-36 states "As to a format and a control mode of *data* flowing on the transmission line 5, many modes such as a serial mode, parallel mode and a competitive control mode can be used." Column 4, lines 37-39 state "The communication unit 3 performs ... *data* input/output from/to the copying machine 1, temporary storage of *data* coming from the copying machine" Column 4, lines 59-68 and column 5, lines

1-24 further define the generation and transmission of internal office machine diagnostic *data* which include digital information to be transferred via a data transmission line 5. Mii also exemplifies a signal composition on the transmission line 5 between the I/F circuit 2 and the communication unit 3 with tables 1 and 2 in columns 6 and 7 respectively. Mii states in column 6 “*Data* such as a number of copies of each paper size ... are outputted in 8 bits *data* signals”

In contradistinction, Applicant’s invention discloses and presently claims signal receiving means adapted to solely receive usage condition signals which are distinct and isolated from internally generated office machine diagnostic signals and office machine data signals. The receiving means is adapted to receive non-data bearing signals from an office machine in response a contact closure or a pulse level change, as discussed on page 5, lines 16-19, page 7, lines 24-27, page 8, lines 1-8, and 18-20, page 9, lines 26-27, and page 10, lines 1-12, page 15, lines 23-25, page 16, lines 1, and 21-25.

Applicant’s invention is patentably distinguishable from Mii’s invention in that Applicant’s transmission line coupling an office machine to the inventive system is not like Mii’s data bus structure, which transfers meaningful information in the form of data bits. The primary scope of Applicant’s invention is specific to “usage management” while the primary scope of Mii’s invention is directed to “diagnostics and maintenance” of office machines. Mii’s invention communicates with office machine internal circuitry via a data bus to verify operation and to monitor for abnormalities. Data bits are then transferred on the data bus for use by Mii’s invention to be used for historical, preventative and problem reporting. Unlike Mii’s inventive system, Applicant’s invention does not interface with office machine internal circuitry, but instead

is coupled to an office machine "foreign interface" port, also known as an "external counter" interface port, and is adapted to monitor office machine usage and to report by various methods this information back to a host computer for report generation and to manage the office machine usage.

Unlike Applicant's invention, Mii's inventive system requires various sensor devices to provide diagnostic information and also interfaces with existing office machine internal firmware to transfer information stored in the office machine to Mii's system. Mii's system, although providing many new features previously unknown in the prior art, continues to interface with office machines using methods and devices well known and disclosed in the prior art. Applicant's invention specifically avoids these well known methods by providing many novel features using a signal receiving means structure entirely distinct from the signal receiving structure which is used, disclosed and claimed by Mii.

In light of the amendments and remarks made above regarding claims 1 and 34, Applicant respectfully submits that claims 1 and 34 as amended are now believed to be allowable. Applicant also respectfully submits claims 2-33, which depend from independent claim 1, and claims 35-47, which depend from independent claim 34, are also patentably distinguishable over the cited art of record, either alone or in combination. To the extent that independent claims 1 and 34 are now believed to be allowable as amended, dependent claims 2-33, which introduce structural limitations beyond those specified in allowable claim 1, and dependent claims 35-47, which introduce structural limitations beyond those specified in allowable claim 34, are also believed to be in condition for allowance.

Upon review of the claims, Applicant discovered dependent claims 9 and 10 were previously made erroneously dependent on claim 6 and therefore have been amended to correctly depend from claim 8.

Applicant has also amended claim 22 by removing limitations embedded within claim 22 which have now been incorporated within claims 1 and 34 to more accurately and precisely define and claim what Applicant regards as the invention in claims 1 and 34.

Claim Rejections Under 35 U.S.C. § 103

Examiner rejected claims 4-14, 16-22, 24-33, 40-42, and 44-47 under 35 U.S.C. §103 as being unpatentable over Mii (5,282,127). Applicant's attorney wishes to thank the Examiner for his detailed review of the claims. It is believed that the above amendments address all necessary changes that must be made to the claims. In addition, it is believed that none of the above changes results in the introduction of any new matter into the specification. The amendments to independent claims 1 and 34 now renders the dependent claim rejections under 35 U.S.C. §103 moot.

For the sake of clarity and more accurately and precisely defining Applicant's invention however, Applicant has amended claim 22 and has incorporated some of the limitations of claim 22 into claims 1 and 34; and furthermore, Applicant has more accurately and precisely defined such limitations in accordance with the specification and without adding new subject matter. Applicant respectfully submits that these amendments are believed to render independent claims 1 and 34 allowable over the cited art of record.

Applicant respectfully submits that there is no suggestion or motivation in the prior art represented by the Mii reference that such reference be modified to arrive at Applicant's invention. Absent such suggestion or motivation, there would be no reason why one skilled in the art, who was faced with the same problem confronting the Applicant and who had no prior knowledge of Applicant's claimed structure, would consult the particular reference suggested by the Examiner. For example, the Mii patent shows no recognition of, or pertinence to the problem addressed by Applicant directed to a system which provides usage management of office machines without accessing any office machine generated diagnostic signals or any office machine firmware or any office machine information stored in an office machine for later transfer via a data bus structure. In fact, the Mii patent is directed to a diagnostic and maintenance system which receives diagnostic and maintenance information from office machines via bit data, which is the very type of communication structure which Applicant wishes to avoid. Such bit data information transmission necessarily requires use of interface structures much more complex than the signal receiving means structure disclosed and claimed by Applicant. Therefore, one skilled in the art would not be likely to use such reference, alone or in combination with another reference, in an attempt to solve the problems addressed by Applicant's invention.

In any event, the structure that results from the Examiner's proposed combinations of features would not meet the terms of Applicant's proposed amendment to rejected claims 1 and 34. Neither the Mii reference nor any other reference cited by the Examiner shows a multipurpose remote office machine management system which receives office machine

information solely via an external interface port without access to office machine internally generated diagnostic signals or other office machine internally generated bit data.

Applicant respectfully submits that these claimed features are not found in any of the references separately, and that such features would therefore be lacking in any combination of the references cited by the Examiner.

Finally, Applicant also respectfully submits that it is a well settled principle that the claimed invention must be considered as a whole. Multiple cited prior art references must have motivation or suggest the desirability of being combined, and the references must be viewed without the benefit of hindsight afforded by the disclosure. *See Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 29 USPQ 182, 187 n.5 (Fed. Cir.), *cert. denied*, 479 U.S. 827 (1986).

Conclusion

In view of the foregoing amendments and remarks, and upon entry thereof, the subject application is believed to be in condition for allowance.

No additional fees are believed required for entry of the amendments requested herein.

Entry of the requested amendments, and reconsideration of the application as amended are respectfully solicited.

If it is felt for any reason that direct communication with Applicant would serve to advance prosecution of this case to finality, the Examiner is invited to call the undersigned at the telephone number listed below.

Respectfully submitted,
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By their attorney,

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Date

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